Full Text PA-97-052

ACADEMIC RESEARCH ENHANCEMENT AWARD

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PURPOSE

The National Institutes of Health (NIH) is continuing to make a special effort to stimulate research in educational institutions that provide baccalaureate training for a significant number of the Nation's research scientists but that have not been major recipients of NIH support. Since Fiscal Year (FY) 1985, Congressional appropriations for the NIH have included funds for this initiative, which NIH has implemented through the Academic Research Enhancement Award (AREA) program and an annual Request For Applications. Since it is anticipated that funds will continue to be available each year, the NIH is now inviting applications for AREA grants (R15) through a standing, ongoing Program Announcement.

AREA funds are intended to support new or ongoing health-related research projects proposed by faculty members of eligible institutions. The AREA will enable qualified scientists to receive support for small-scale research projects. These grants create a research opportunity for scientists and institutions otherwise unlikely to participate extensively in NIH programs to participate in the Nation~s biomedical and behavioral reserach effort. It is anticipated that

investigators supported under the AREA program will benefit from the opportunity to conduct independent research; that the grantee institution will benefit from a research environment strengthened through AREA grants and furthered by participation in the diverse extramural programs of the NIH; and that students will benefit from exposure to and participation in research and be encouraged to pursue graduate studies in the health sciences.

HEALTHY PEOPLE 2000

The Public Health Service (PHS) is committed to achieving the health promotion and disease prevention objectives of "Healthy People 2000," a PHS-led national activity for setting priority areas. This PA, Academic Research Enhancement Award, is related to the priority areas of biomedial and behavioral science research. Potential applicants may obtain a copy of "Healthy People 2000" (Full Report: Stock No. 017-001-00474-0 or Summary Report: Stock No. 017-001-00473-1) through the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325 (telephone 202-512-1800).

ELIGIBILITY REQUIREMENTS

Applicant Institutions: All health professional schools and other academic components of domestic institutions offering baccalaureate or advanced degrees in the sciences related to health are eligible, except those that have received research grants and/or cooperative agreements from the NIH totaling more than $2 million per year (in both direct and indirect costs) in each of four or more years during the period from FY 1990 through FY 1996. To verify the eligibility of a school or component with regard to this requirement, applicants should check the list of FY 1997 INeligible schools that is available on the NIH Home Page on the World Wide Web (http://www/nih.gov) under the Grants and Contracts sub-menu. If the name of the school does not appear on the list, it may be eligible to apply for AREA grants in FY 1997. For purposes of eligibility for the AREA program, the following definitions apply:

o "Health professional schools" (schools of medicine, dentistry, osteopathy, pharmacy, nursing, veterinary medicine, public health, optometry, allied health, and podiatry) means an accredited public or non-profit private school that provides training leading to a degree granted by that school, for example, a doctor of medicine, a doctor of dentistry, or equivalent degree. The term "accredited" means a school or program that is accredited by a recognized body or bodies approved for such purpose by the Secretary of Education.

o "Research grants and cooperative agreements" include the following activity codes ONLY: K01, K02, K04, K05, K06, K08, K11, K12, K14, K15, K16, K20, K21, P01, P40, P41, P42, P50, P60, R01, R03, R10, R15, R21, R22, R23, R24, R29, R35, R37, R55, U01, U10, U24, U41, U42, and U54.

o "Other academic components" means all schools, departments, colleges, and free-standing institutes of the institution EXCEPT the health professional schools, taken as a SINGLE eligible component.

An applicant institution may submit several applications proposing different research projects from different investigators.

Proposed Principal Investigator:

o Must not be the principal investigator of any active NIH research grant (including an AREA grant) at the time of award of an AREA grant.

o May not be awarded more than one AREA grant at a time.

o May not submit an application to NIH for a research project grant (e.g., R01, R03, R21, R29) for essentially the same project proposed in a pending AREA application.

o Are expected to conduct the majority of their research at their own institution, although limited use of special facilities or equipment at another institution is permitted.

Scientists working in AREA-eligible, minority and women's educational institutions are encouraged to participate in this program.

MECHANISM OF SUPPORT

The R15 mechanism is used to designate applications and awards for AREA research grants to distinguish the special objectives of these grants. This award will enable scientists at eligible institutions to receive support for small research projects as well as for feasibility studies, pilot studies, and other small-scale programs that would provide data preliminary to a traditional research project grant. Through this mechanism, a maximum of $75,000 in direct costs plus indirect costs (at the rate negotiated for the institution) may be awarded for a period of up to three years. Allowable direct costs include salaries for the principal investigator and other research

personnel, supplies, equipment, travel, and other items specifically associated with the proposed research project. In any one year of an AREA grant, no more than $35,000 in direct costs may be requested. If necessary, a no-cost extension of up to twelve months may be requested by the institution to allow the principal investigator to finish the proposed project.

Supplemental Funding of Existing Grants

The NIH recognizes the need to increase the number of underrepresented minority scientists participating in biomedical and behavioral research. As a result, the NIH is emphasizing the use of administrative supplements to existing grants in order to attract underrepresented minorities into biomedical and behavioral research. See the NIH Guide for Grants and Contracts, Vol. 22, No. 43, November 26, 1993, for a full discussion of this additional funding opportunity and of procedures for submitting a request for a supplement. This information may also be obtained from the Office of Extramural Outreach and Information Resources, Office of Extramural Research, NIH, at the address listed under APPLICATION PROCEDURES.

Principal Investigators at domestic institutions who hold an active NIH research grant (including an active AREA grant) are eligible to submit a request for an administrative supplement to the awarding component which issued the parent grant. For purposes of the active AREA grant, the request will be to support a minority candidate who is a high school or undergraduate student. Exceptions to this rule may be made by the awarding component which issued the AREA grant.

The NIH recognizes also the need to extend opportunities to individuals with disabilities who are capable of entering or resuming research careers. According to the Americans With Disabilities Act, a "disabled individual" is one who has a physical or mental impairment that substantially limits one or more major life activities, who has a record of such impairment, or who is regarded as having such an impairment. Accordingly, Principal Investigators of an active AREA grant may submit a request for an administrative supplement for this purpose also to the awarding component which issued the parent grant. See the NIH Guide for Grants and Contracts, Vol. 21, No. 3, January 24, 1992, for a full discussion of this additional funding opportunity and procedures for submitting a request for a supplement. This information may also be obtained from the Office of Extramural Outreach and Information Resources (see Inquiries below).

RESEARCH OBJECTIVES

Background

The NIH is the principal research arm of the Department of Health and Human Services (HHS). At present, 21 awarding components (known as Institutes or Centers) and several support and service divisions constitute the NIH. The NIH fosters the development of new knowledge in the biomedical and behavioral sciences, the ultimate goal of which is to combat disease and improve the health of mankind. To achieve its goals, NIH conducts research in its own laboratories and clinics, and it funds research in research and academic institutions throughout the world by means of grants, cooperative agreements, and contracts. The majority of grantees are academic institutions, but other organizations (including for-profit organizations) participate significantly in NIH-supported research. The NIH provides funds for research projects, research training, career development of new and established scientists, and research and medical library resources.

Research grants represent the largest proportion of all NIH extramural awards. The research plan for each research grant application is generated and developed by an investigator referred to as the "principal investigator." On behalf of the investigator, the institution submits the grant application to the NIH for consideration for support. Principal investigators of NIH grant applications are most frequently affiliated with universities or medical schools, and most of them hold doctorate degrees.

The Division of Research Grants (DRG), a component of the NIH, receives all grant applications submitted to the NIH for support, assesses each one for relevance to the health mission of the NIH; and assigns those that are acceptable to the appropriate scientific review group (SRG) for initial scientific merit review, and to the appropriate NIH awarding component for consideration for an award.

Since its inception, the NIH has used a dual peer review system for the evaluation of applications. This system, which has a statutory base, ensures that only the most meritorious and relevant proposals are considered for funding. The first level of review involves panels composed primarily of non-Federal experts, referred to as SRGs or study sections, which are organized according to scientific areas. These panels of experts render an impartial review and evaluation of each application. They consider not only the scientific merit of a proposal, but also the background and experience of the principal investigator, the research facilities available for the project, and the appropriateness of the direct costs requested.

The second level of review is made by the National Advisory Council or Board of the awarding component to which the application is assigned. These groups, composed of scientists, physicians, and leaders in public affairs, are chosen for their expertise, interest, or activity in

ing component's mission. The council or board will take into account the relevance of the goals of the ssion of the awarding component, program balance, and the availability of funds.

The AREA program and its application, review, and award procedures have been developed within this established framework for NIH grant-supported research activities.

RESEARCH OBJECTIVES

AREA grants will support small-scale, new or ongoing health-related research projects, including pilot research projects and feasibility studies; development, testing, and refinement of research techniques; secondary analysis of available data sets; and similar discrete research projects that demonstrate research capability.

Listed below, by awarding component, are research topics that may be of particular interest to potential principal investigators under the AREA program. Also listed in the Inquiries section is the appropriate awarding component program representative whom a potential applicant is encouraged to contact for additional scientific program information and for pre-application guidance.

The research objectives of the AREA program are those of the individual NIH Institutes and Centers. They are as follows:

National Institute on Aging (NIA)

The NIA is interested in, and has responsibilities for, aging research that includes. fundamental studies of biological processes, including studies of aging at the molecular, organelle, cellular, organ, and organ system levels; the interaction of aging and diseases of aging; biomedical and psychosocial factors in maintaining health and effective functioning in the middle and later years, relevant social and behavioral relationships; and research that broadens the base of knowledge underlying adequate health services for the aging and the aged. The Institute is interested in normal physiological and biochemical changes with aging, involving areas such as immunology, neurobiology, endocrinology, nutrition, and exercise physiology, as well as clinical diseases and disorders of aging such as Alzheimer's disease, osteoporosis, osteoarthritis, falls, and urinary incontinence. The Institute also has responsibility for research concerned with the biological, social, psychological, cultural, and economic factors that affect both the process of growing old and the status and roles of older people in society. Under this broad mandate, health and

wellbeing are viewed as the outcome of complex biological, physiological, medical, psychological, and socioenvironmental processes.

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

The NIAAA supports basic and applied research on mechanisms of action of alcohol on blobehavioral processes and effects of alcohol on the mind and body. Support is available to develop new knowledge in a wide range of areas relevant to alcohol abuse and alcoholism; biochemical, physiologic, and behavioral mechanisms leading to pathologic drinking behavior; alcohol-induced organ damage; and clinical, behavioral, and epidemiological studies that will lead to more effective diagnosis, prevention, and treatment. The NIAAA supports alcohol-relevant research involving all of the life-science disciplines.

National Institute of Allergy and Infectious Diseases (NIAID)

The objective of NIAIID's research program is to acquire the knowledge which will eventually lead to the treatment and prevention of infectious, allergic, and immunologic diseases. The Institute's overall strategy of attacking the array of problems on a broad front relies on free-ranging research in microbiology and includes the following research problem areas: isolation, characterization, and biology of disease-causing microbes; antibiotic or drug resistance among bacteria, viruses, and parasites; development of successful and safe antimicrobial compounds, particularly for viruses and parasites; and new approaches to understand and manipulate the immune system.

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

The NIAMS supports basic and clinical studies related to the rheumatic diseases and to diseases and disorders of connective tissue, bone, and skin. Areas of research include: inflammation, infectious agents and genetic factors related to rheumatic diseases; structure and function of cartilage and connective tissue; arthritis in children; systemic lupus erythematosus; rheumatoid arthritis; - osteoarthritis; spondylitis and related syndromes; gout and pseudogout; the structure and function of skeletal muscle; bone structure, formation, degradation and repair; osteoporosis; biomaterials, biomechanics, and joint replacement; inherited connective tissue diseases; bone immunology and transplantation; metabolism of epidermis, dermis and subcutaneous fat; immunologically mediated cutaneous disorders; photobiology, photoallergy, and phototoxic reactions; vitiligo; psoriasis, bullous diseases of the skin; and acne.

National Cancer Institute (NCI)

The NCI is the Federal Government's principal agency for cancer research and control. Programs of the NCI focus on: (1) cancer etiology including laboratory, field, and epidemiologic and biometric research on the cause and natural history of cancer and means for preventing cancer, as well as studies on the mechanisms of cancer induction and promotion by chemicals, viruses, and environmental agents; (2) cancer biology and diagnosis research in the areas of cell biology, inununology, molecular biology, developmental biology, biochemistry, genetics, and pathology; (3) cancer treatment research in the areas of drug development, biological response modifiers, and radiotherapy development, including diagnostic imaging and clinical trials for curing or controlling cancer; and (4) cancer prevention and control research, development, technology transfer, demonstration, and education and information dissemination programs to expedite the use of new information relevant to prevention, detection, and diagnosis of cancer and pretreatment evaluation, treatment, rehabilitation, and continuing care of cancer patients.

National Institute of Child Health and Human Development (NICHD)

The goal of NICHD's research programs is the improvement of maternal, infant, and child health through support of basic and clinical research to elucidate normal and abnormal growth, development, and maturation, from gametogenesis through maturity. To this end, NICHD supports research in: reproductive biology, chemistry, and medicine; fertility regulation; contraceptive development and evaluation; perinatology, pregnancy, and labor; developmental and clinical genetics; population dynamics; developmental endocrinology; social, cognitive, and affective development; and the biological bases of behavioral development.

The NICHD also supports biomedical and behavioral research on mental retardation and developmental disabilities; pediatric, adolescent, and maternal HIV infection and AIDS; and, in the context of its National Center for Medical Rehabilitation Research, NICHD also supports the development of medical, behavioral, psychological, social, and technological interventions designed to optimize functioning after impairment, disability, or handicap.

National Institute on Deafness and Other Communication Disorders (NIDCD)

Programs of the NIDCD focus on the identification, encouragement, and support of research aimed at improved diagnosis, treatment, and prevention of disorders of human communication. This would include research in all aspects of speech, hearing, language, equilibrium, and the special senses (taste, touch, smell). Basic and clinical studies of anatomical, physiological, biochemical, behavioral, acoustical and pathological aspects of communicative disorders and

otolaryngological diseases are encouraged.

National Institute of Dental Research (NIDR)

The mission of the NIDR is the advancement of knowledge concerning the oral-facial complex in all of its aspects. This includes the conduct and support of research into the etiology, epidemiology, prevention, diagnosis, and treatment of such dental diseases as caries and periodontal disease; increasing our knowledge about craniofacial development and malformations; studies of various oral soft tissue diseases, including herpes and oral cancer; and increasing knowledge about orofacial pain and other oral sensory and motor dysfunctions. Cutting across these oral disease or dysfunction areas are research activities in such areas as salivary glands and secretions, mineralization and fluorides, tooth pulp biology, nutrition, behavioral studies, and research related to dental implants, replants, and transplants and to dental restorative biologically comparable and derived materials.

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

The NIDDK conducts and supports research focused on a number of diseases that are characterized by chronicity and long-term disabling effects. Areas of interest include: diabetes, cystic fibrosis, and other errors of metabolism; diseases of the gastrointestinal tract, including the liver and gallbladder; endocrine disorders; diseases of the blood; kidney and urological diseases, and studies of nutrition and nutrition-related disorders. NIDDK's responsibilities in these areas encompass investigations of etiology, pathogenesis, diagnosis, and treatment.

National Institute on Drug Abuse (NIDA)

The research programs of the NIDA are devoted to increasing the understanding of the causes and consequences of drug abuse. This goal is accomplished by support of extramural research projects that improve and refine the methods for the assessment, treatment and prevention of drug abuse. The scientific studies supported are broad and include: fundamental studies on the mechanisms of action of abused drugs; biochemical strategies for identifying and developing successful drug abuse treatment agents; behavioral and clinical pharmacology; services research; epidemiology, natural history and prevention of drug abuse; treatment research; community-based research on reduction of drug-taking behaviors; and studies of drug abuse as a contributing factor in the AIDS epidemic.

National Institute of Environmental Health Sciences (NEEHS)

The NIEHS is the principal Federal agency for biomedical research on the effects of chemical, physical, and biological environmental agents on human health and well-being. The Institute supports research and training focused on the identification, assessment, and mechanism of action of potentially harmful agents in the environment. Research results form the basis for preventive programs for enviromentally-related diseases and for action by regulatory agencies. The NIEHS, thus, has responsibility for providing knowledge to assist in societal decisions involving current and future chemicals, processes, and other factors which may have impact on human health either directly or indirectly by altering man's environment. This responsibility mandates efforts toward a thorough understanding of the early manifestations and the mechanism of human disease brought about by toxic agents and the development of more accurate and more rapid methods to predict and assess the toxicity of such agents.

National Eye Institute (NEI)

The mission of the NEI is to gain new knowledge concerning the normal functions of the eye and visual system and the pathology of visual disorders. Working to this end, the NEI supports research and research training aimed at improving the prevention, diagnosis, and treatment of visual disorders and fosters research in the rehabilitation of the visually handicapped. Both laboratory and clinical research are funded under the following major NEI programs: Retinal and Choroidal Diseases; Corneal Diseases; Cataract; Glaucoma; Strabismus, Amblyopia and Visual Processing. Within each program, research ranges from attempts to elucidate the fundamental biological processes that underlie disease to the development and clinical testing of new diagnostic and therapeutic techniques.

National Institute of General Medical Sciences (NIGMS)

The NIGMS supports non-disease-targeted research in the basic biomedical sciences. Research areas of interest include biophysics, cell biology, molecular biology, genetics, pharmacology, and those areas of chemistry which have relevance to biomedical problems. The emphasis is on understanding basic biological mechanisms, particularly at the cellular, subcellular, and molecular levels.

National Heart, Lung, and Blood Institute (NHLBI)

The NHLBI supports basic and clinical research pertaining to the structure, function, and diseases of the cardiovascular, pulmonary, and blood systems. The Institute's research program also

includes transfusion medicine and blood resources. The NHLBI carries out its mission through a number of research programs that provide support for projects ranging from studies at the molecular level to whole body studies in man and animals. Examples of research areas supported by the Institute include atherosclerosis, hypertension, cerebrovascular disease (directed at the dependent variable of blood, heart, or blood vessel), coronary heart disease, peripheral vascular diseases, arrhythmias, heart failure, and shock, congenital and rheumatic heart diseases, cardiomyopathies and infections of the heart, circulatory assistance, structure and function of the lung, chronic obstructive lung diseases, pediatric pulmonary diseases, occupational and immunologic interstitial lung diseases, respiratory failure, pulmonary vascular diseases, bleeding and clotting disorders, disorders of the red blood cell, sickle cell disease, and blood resources.

National Human Genome Research Institute (NHGRI)

The NCHGR is currently engaged in a research program designed to characterize the human genome and the genomes of selected model organisms. This research program has the following interrelated goals: the construction of high resolution genetic linkage maps; the development of a variety of physical maps; the determination of the complete nucleotide sequence of the DNA of selected organisms; the development of the capability for collecting, storing, distributing, and analyzing the data produced; and the development of appropriate new technologies to achieve these goals. This project will develop a series of resources that will be available to the research community to facilitate both basic research and the application of the knowledge gained to the prevention, diagnosis, and therapy of disease.

National Institute of Mental Health (NINM)

The NIMH exerts leadership on behalf of the Nation's mentally ill citizens by creating a firm scientific foundation for the clinical care of mental disorders; by developing and assessing innovative approaches to diagnosis, treatment, and prevention of mental illnesses; and by exchanging information nationally and internationally with all relevant individuals and organizations to improve the state of mental health knowledge and its application.
The NIMH conducts and supports an integrated program of basic and clinical research and research training in biology, neuroscience, epidemiology, and psychology and other behavioral sciences, as well as services research on the organization, administration, and financing of mental health services and service systems. These studies include theoretical, laboratory, epidemiologic, clinical, methodologic and field research on well and ill human subjects and populations of all ages, and on animals where appropriate to the research questions.

National Institute of Neurological Disorders and Stroke (NINDS)

The NINDS serves as the focal point at the NIH for research on the nervous system, including cerebrovascular disease (when the dependent variable is the nervous system), the neuromuscular apparatus, and the special senses of touch and pain.

National Institute of Nursing Research (NINR)

The NINR supports research on the biological and behavioral aspects of critical health problems that confront the Nation. According to its broad mandate, the Institute seeks to reduce the burden of illness and disability by understanding and easing the effects of acute and chronic illness; to improve health-related quality of life by preventing or delaying the onset of disease or slowing its progression; to establish better approaches to promoting health and preventing disease; and to improve clinical environments by testing interventions that influence patient health outcomes and reduce costs and demand for care. The NINR is interested in studies containing innovative ideas and sound methodologies in all aspects of nursing research consistent with its mission. Examples of areas of special interest include biobehavioral aspects of pain; management of symptoms associated with specific diseases or disorders; effects of life threatening illnesses; prevention or reduction of risk factors, particularly in young children; interactions among genetic factors, environment, and life style; developmental issues related to life-stage transitions; ameliorating effects of chronic illnesses; and health of minorities and other underserved populations.

National Library of Medicine (NLM)

The objective of NLM's research program is the support of investigations related to the generation, organization, and utilization of health knowledge. Such support may involve: (1) medical informatics research, a branch of investigation of the fundamental issues of health knowledge communication vis-à-vis advanced computer technologies; (2) research in health science librarianship and information science; or (3) assistance for the preparation and publication of scientific works in the health area.

National Center for Research Resources (NCRR)

The NCRR administers programs that develop and ensure the availability of resources essential to the efficient and effective conduct of human health-related research. NCRR programs are primarily institutional in nature but, while support is generally in the form of resource grants, the NCRR makes awards for support of projects which contribute to improvement of the capability of resources to serve biomedical research. The following are research areas appropriate to the NCRR interests: (1) Research and Development in Instrumentation and Specialized Technologies for Biomedical Research. This encompasses instruments, devices, and processes to facilitate research in blomolecular and cellular structure and function. (Instrumentation includes mass spectrometry, nuclear magnetic resonance, electron spin resonance, equipment for fast kinetic research, X-ray diffraction, electron microscopy, and flow cytometry.) The application of computer science, computer engineering, and biomedical engineering to biomedical research problems is also of interest. (This includes knowledge engineering, information technology, computer graphics, image processing, computer modeling and simulation, task dedicated computer systems, and development of implantable microsensors and transducers.); (2) Research in Laboratory Animal Sciences. (This includes the etiology, pathogenesis, and control of laboratory animal diseases, as well as the environmental requirements of laboratory animals.); and (3) Development of Biomedical Research Methods Employing Lower Organisms, Tissues/Cells in Culture, or Mathematical and Computer Simulations.

INCLUSION OF WOMEN AND MINORITIES IN RESEARCH INVOLVING HUMAN SUBJECTS

It is the policy of the NIH that women and members of minority groups and their subpopulations must be included in all NIH supported biiomedical and behavioral research projects involving human subjects, unless a clear and compellling rationale and justification is provided that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research. This policy results from the NIH Revitalization Act of 1993 (Section 492B of Public Law 103-43).

All investigators proposing research involving human subjects should read the "NIH Guidelines For Inclusion of Women and Minorities as Subjects in Clinical Research," which have been published in the Federal Register of March 28, 1994 (FR 59 14508-14513) and in the NIH Guide for Grants and Contracts, Vol. 23, No. 11, March 18, 1994.

APPLICATION PROCEDURES

The PHS 398 (rev. 5/95) form must be used to apply for an AREA grant.

In addition, applicants must observe the supplemental instructions for AREA applications contained in this Program Announcement, as the instructions identify the AREA program as a "just-in-time" mechanism and must be followed in preparing an application. The PHS 398 form may be downloaded from the NIH Home Page (http://www.nih.gov) from the Grants and Contracts submenu. It is also available at most institutional offices of sponsored research, and may be obtained from the Division of Extramural Outreach and Information Resources, National Institutes of Health, 6701 Rockledge Drive, MSC 7910, Bethesda, MD 20892-7910, telephone 301/435-0714, email: ASKNIH@odrockm1.od.nih.gov.

Supplemental Instructions

The Department of Health and Human Services has designated the NIH a "reinvention laboratory." One reinvention objective is to simplify and improve all stages of the grant process: application, review, award, and administration. The AREA program is one of the first NIH programs where changes have been introduced that are designed to reduce the administrative burden in applying for a grant without compromising the information needed to assess the scientific and technical merit of the proposed project and the reasonableness of the proposed budget. The principle of "just-in-time" (JIT) is to avoid asking for information until it is actually needed in the process. As applied to the handling of AREA applications, JIT will postpone until after an application has been reviewed for scientific merit the collection of certain information that previously was required in all competing applications at the time of submission. Collection of the information just in time for an award to be issued means that the information will be current. Moreover, the information is collected only for those applications with a likelihood of funding, which significantly relieve the administrative burden for the majority of applicants.

The instructions below refer to items in the PHS 398 application form where either the information requested has been modified or the item should not be completed, although the information may be requested after initial review by the NIH awarding component if there is a likelihood that the application will be funded. The instructions also indicate the information specific to AREA applications that must be provided. The Page Numbers in parentheses refer to the instruction pages of the application kit.

GRANT APPLICATION" - Face Page (AA):
Amended (revised) applications must indicate the number assigned to the previous application in the block in the upper right corner. Applicants may submit no more than two revised (amended) applications within a time period of two years from the receipt date of the initial, unamended application.

Item 2 -- Check the "YES" box and enter PA-97-** and "Academic Research Enhancement Award." (Page 7)

Item 3c -- Do not include the Social Security Number on the Face Page; please include this information on the Personal Data Page.

Item 6 --The entire proposed project period must not exceed three years. (Page 9)

Item 7b -- Do not complete. Indirect costs will be calculated at the time of award using the institution~s actual indirect cost rate. Identification of indirect cost exclusions will be requested at that time.

Item 8a -- This amount must not exceed $75,000. (Page 9)

Item 8b -- Do not complete.

DETAILED BUDGET FOR INITIAL BUDGET PERIOD - Form Page 4 (DD):
Do not submit this page. It is not required, nor will it be accepted at the time of application. NIH may request this information just prior to award.

BUDGET FOR ENTIRE PROPOSED PERIOD OF SUPPORT - Form Page 5 (EE):
o Do not provide the Budget Category Totals (i.e., Personnel, Consultant Costs, etc.); but, be sure to provide the "Total Direct Costs" for each year and the "Total Direct Costs for Entire Proposed Period of Support."

o Begin the "Justification" in the space provided, and use continuation pages as needed.

- Name all personnel (salaried or unsalaried), their percent effort, their role on the project, and provide a narrative justification based on their role and percent effort;

- Name all consultants, their organizational affiliation, and describe the services they will perform;

- For any major budget items other than personnel that are unusual for the scope of the research, provide a narrative justification;

- If consortium/contractual costs are requested, provide the percentage of the subcontract total costs (direct and indirect) relative to the total direct costs of the overall project. The subcontract budget justification should be prepared according to the instructions above.

With regard to all budget categories, if there are any unusual or unusually high costs, provide an explanation. (Page 14)

BIOGRAPHICAL SKETCH - Form Page 6 (FF):
For each key person, include within the two-page limit, in addition to the information required in the instructions, the research projects they have completed and/or the research grants they have participated in during the last five years that are relevant to the proposed project (title, principal investigator, funding sources, and role on project must be provided).

For the principal investigator only, on a third, continuation page, provide information on his or her (a) experience in supervising students in research, and (b) other relationships within the institutional framework (e.g., cross-departmental research collaborations), which are among the criteria on which the merit of the application will be evaluated. (Page 14)

OTHER SUPPORT - Format Page 7 (GG):
Do not submit this page. This information may be requested by the NIH awarding component if the application is likely to be funded. (Page 14)

However, the Biographical Sketch for each key personnel should include information on the other projects that the person is working on or has worked on that are relevant to the proposed project (see above).

RESOURCES (HH), Form Page 8:
In addition to the information requested under "Other" (Page 15), provide:

o a profile of the students of the applicant School/academic component and any information or estimate of the number who have obtained the baccalaureate degree and gone on to obtain an academic or professional doctoral degree in the health-related sciences since 1986;

o a description of the special characteristics of the School/academic component that make it appropriate for an AREA award, where the goals of the AREA program are to: (1) strengthen the research environment of schools that are not research intensive; (2) expose students at such institutions to research, and (3) provide support for meritorious research.

o a description of the likely impact of an AREA award on the principal investigator and the School/academic component. How will the AREA award strengthen the research environment of the School/academic component? How will the AREA award expose students to research at your institution?

o a statement of institutional support for the proposed research project (e.g., release time, other support, matching funds, etc.)

RESEARCH PLAN:
Do not exceed 20 pages for the entire Research Plan. An appendix may be included. (Page 15)

o Introduction -- An Introduction, not to exceed three pages, is to be submitted only for a revised application.

o Preliminary Studies/Progress Report -- This section is optional for new applications. It is required for renewal (competing continuation) applications; three to four pages are recommended and the list of publications and inventions is not included in the 20 page limit for the Research Plan. (Page 16)

o Research Design and Methods -- There is no specific recommended number of pages for this section. However, the entire Research Plan (including Specific Aims; Background and Significance; Preliminary Studies/Progress Report, if used; and Research Design and Methods) may not exceed 20 pages. (Page 16)

APPENDIX:
May be submitted according to the instructions. (Page 19)

CHECKLIST (II):
Do not submit this page. A completed checklist will be required just prior to award.

PERSONNEL REPORT (JJ):
Do not submit this page for competing continuation applications.

PERSONAL DATA PAGE (KK):
Please add the Social Security Number to the upper right hand corner.

REVIEW CONSIDERATIONS

Applications will be accepted for the June 25, 1997, receipt date. Thereafter, the regular receipt dates for AREA applications will be January 25, May 25, and September 25. Applications are submitted to the NIH Division of Research Grants (DRG) and will be reviewed by DRG review groups for scientific and technical merit according to standard NIH peer review procedures, as described above (see Background). Applications will be assigned on the basis of established Public Health Service referral guidelines. As part of the initial merit review, a streamlined review process, which is employed for the review of most NIH research grant applications, will be used. Under this process, reviewers are asked to identify the approximate upper half of applications. These applications are discussed at the review group meeting and receive a "priority score" ranging from "best" (100) to "average" (250-300), while the lower half of applications are normally not discussed nor given a priority score. Nevertheless, all applicants will receive summary statements which will consist of the written critiques of two or more assigned reviewers.

Following the initial scientific-technical review, applications receive a second-level review by the appropriate national advisory council. In conformance with the spirit of the House Committee Report 98-911 (to accompany H.R. 6028, HHS Appropriations for FY 1985), special consideration will be given in the funding decision process to applications from those "smaller, less prominent, four- year, public and private colleges and universities which provide undergraduate training for a significant number of our nation's research scientists but which have not shared adequately in the growth of the NIH extramural program." NIH implements this direction through the following policy: Among projects of essentially equivalent scientific merit and program relevance, preference will be given to those submitted by institutions that have granted baccalaureate degrees to 25 or more individuals who have obtained academic or professional doctoral degrees in the health-related sciences during the period 1986-1996.

The standard NIH review schedule will apply to AREA grant applications:

	Cycle I	Cycle II	Cycle III
Application Receipt Date:	Jan 25	May 25	Sep 25
Scientific Merit Review:	Jun/Jul	Oct/Nov	Feb/Mar
Advisory Council Review:	Sep/Oct	Jan/Feb	May/Jun
Earliest Project Start Date:	Dec	Apr	Jul

Applications received for the June 25, 1997 receipt date will be handled according to the schedule for Cycle II. In 1998 and subsequent years, the spring receipt date will be May 25.

Review Criteria: In carrying out the scientific and technical merit review of AREA applications, the scientific review group will take into account:

(a) the significance, originality, and technical merit of the proposed study, including, where appropriate, the project's potential for contribution in meritorious, small-scale research;

(b) the adequacy of the methodology and the quality of any preliminary data or, in the case of competitive renewals, the progress report;

(c) the competency of the principal investigator and of any collaborators and consultants, including academic qualifications, research experience and expertise, productivity, any special attributes, and the principal investigator~s experience in supervising students in research;

(d) the facilities, resources, and environment of the applicant institution (including existing relevant equipment, animal and/or computer resources, and departmental or interdepartmental cooperation); and the suitability of the applicant School/academic component for an AREA award (the extent to which it fits the goals of the AREA program, the likely availability of well-qualified students, the evidence that students have in the past or are likely to pursue careers in the biomedical and behavioral sciences) and the likely impact of an AREA award on the School/academic component in terms of strengthening the research environment and exposing students to research;

(e) the appropriateness of the proposed budget and duration, including the justification for requested items in terms of the aims and methods of the proposed study; and

(f) the adequacy of the proposed means for protecting against or minimizing any adverse effects upon humans, animals, or the environment, where an application involves such activities.

AWARD CRITERIA

AREA grants are awarded on a competitive basis. The criteria for funding decisions on individual applications will be based on the proposed research project's scientific merit and its relevance to NIH programs, and on the applicant institution's contribution to the undergraduate preparation of doctoral-level health professionals.

Among projects of essentially equivalent scientific merit and program relevance, preference will be given to those submitted by institutions that have granted baccalaureate degrees to 25 or more individuals who have obtained academic or professional doctoral degrees in the health related sciences during the period 1986-1996.
Since a primary objective of the AREA program is to support investigators at undergraduate institutions that provide student training in the sciences, principal investigators are encouraged to include the participation of students in the proposed research to the extent practicable. Both annual Progress Reports and a Final Progress Report will be required of all AREA grantees.

INQUIRIES

Inquiries are encouraged. The opportunity to clarify any issues or questions from potential applicants is welcome.

For inquiries of a scientific nature, potential applicants should contact the Program Contact person for one or more of the Institutes whose scientific interests are closest to those of the proposed research (see Research Objectives section above):

National Institute on Aging
Program Contact:
Dr. Miriam Kelty
Associate Director, Office of Extramural Affairs
7201 Wisconsin Avenue, Room 2C218
Bethesda, MD 20892-9205
Phone: (301) 496-9322
FAX: (301) 402-2945
E-mail: mk46u@nih.gov

National Institute on Alcohol Abuse and Alcoholism
Program Contact:
Dr. Laurie Foudin
Division of Basic Research
6000 Executive Boulevard, Suite 402
Bethesda, MD 20892-7003
Phone: (301) 443-0912
Fax: (301) 594-0673
E-mail: lf29z@nih.gov

National Institute on Allergy and Infectious Diseases
Program Contact:
Mr. Al Czarra
Director, Office of Program Coordination and Operations
Division of Extramural Activities
Solar Building, Room 3C28
Bethesda, MD 20892
Phone: (301) 496-7291
Fax: (301) 402-0369
E-mail: ac20a@nih.gov

National Institute of Arthritis and Musculoskeletal and Skin Diseases
Program Contact:
Dr. Steven J. Hausman
Deputy Director
Building 31, Room 4C32
Bethesda, MD 20892-2350
Phone: (301) 402-1691
Fax: (301) 480-6069
E-mail: sh4lg@nih.gov

National Cancer Institute
Program Contact:
Dr. Vincent T. Oliverio
Associate Director for Program Coordination
Division of Extramural Activities
Executive Plaza North, Suite 600
Bethesda, MD 20892-7405
Phone: (301) 496-9138
Fax: (301) 402-0956
E-mail: vo3c@nih.gov

National Institute of Child Health and Human Development
Program Contact:
Dr. Yvonne Maddox
Deputy Director

Building 31, Room 2A-03
Bethesda, MD 20892-2425
Phone: (301) 496-0104
Fax: (301) 402-1104
E-mail: ym5n@nih.gov

National Institute on Deafness and Other Communication Disorders
Program Contact:
Dr. Jack Pearl
Division of Human Communication
Executive Plaza South, Suite 400-C
Bethesda, MD 20892-7180
Phone: (301) 402-3464
Fax: (301) 402-6251
E-mail: jack_pearl@nih.gov

National Institute of Dental Research
Program Contact:
Dr. Norman S. Braveman
Assistant Director for Program Development
Building 45, Room 4AN-24
Bethesda, MD 20892-6401
Phone: (301) 594-2089
Fax: (301) 480-8318
E-mail: nbl0u@nih.gov

National Institute of Diabetes and Digestive and Kidney Diseases
Program Contact:
Dr. Walter S. Stolz
Director, Division of Extramural Activities
Building 45, Room 6AS-25C
Bethesda, MD 20892-6600
Phone: (301) 594-8834
Fax: (301) 480-3504
E-mail: ws23e@nih.gov

National Institute on Drug Abuse

Program Contact:
Dr. Teresa Levitin
Director, Office of Extramural Program Review
Parklawn Building, Room 10-42
5600 Fishers Lane
Rockville, NM 20857
Phone: (301) 443-2755
Fax: (301) 443-0538
E-mail: tl25u@nih.gov

National Institute of Environmental Health Sciences
Program Contact:
Dr. Jerrold Heindel
P.O. Box 12233, North Campus MD 3-03
Research Triangle Park, NC 27709
Phone: (919) 541-0781
Fax: (919) 541-2843
E-mail: jhl90f@nih.gov

National Eye Institute
Program Contact:
Dr. Ralph J. Helmsen
Research Resources Officer
Executive Plaza South, Suite 350
Bethesda, MD 20892-7164
Phone: (301) 496-5301
Fax: (301) 402-0528
E-mail: rh27v@nih.gov

National Institute of General Medical Sciences
Program Contact:
Dr. Michael R. Martin
Deputy Associate Director for Extramural Activities
Building 45, Room 2AN-32K
Bethesda, MD 20892-6200
Phone: (301) 594-3910
Fax: (301) 480-1852

E-mail: mm72k@nih.gov

National Heart, Lung, and Blood Institute
Program Contact:
Dr. Ronald Geller
Director, Division of Extramural Affairs
6701 Rockledge Drive, Room 7100
Bethesda, MD 20892-7922
Phone: (301) 435-0260
Fax: (301) 480-3460
E-mail: rg33k@nih.gov

National Human Genome Research Institute
Program Contact:
Dr. Bettie J. Graham
Chief, Research Grants Branch
Building 38A, Room 610
Bethesda, MD 20894
Phone: (301) 496-7531
Fax: (301) 480-2770
E-mail: bg30t@nih:gov

National Institute of Mental Health
Program Contact:
Dr. Richard Nakamura
Division of Extramural Activities
Parklawn Building, Room 9-105
5600 Fishers Lane
Rockville, MD 20857
Phone: (301) 443-3367
Fax: (301) 443-0954
E-mail: rn3p@nih.gov

National Institute of Neurological Diseases and Stroke
Program Contact:
Dr. Joseph S. Drage
Training and Special Programs Officer

Federal Building, Room 1016
Bethesda, MD 20892-9190
Phone: (301) 496-4188
Fax: (301) 402-4370
E-mail: jd66x@nih.gov

National Institute of Nursing Research
Program Contact:
Dr. Lynn Amende
Director, Division of Extramural Activities
Building 45, Room 3AN-12
Bethesda, MD 20892-6300
Phone: (301) 594-5968
Fax: (301) 480-8260
E-mail: lal8g@nih.gov

National Library of Medicine
Program Contact:
Dr. Roger W. Dahlen
Chief, Biomedical Information Support Branch
Building 38A, Room 5S522
Bethesda, MD 20894
Phone: (301) 496-4221
Fax: (301) 402-0421
E-mail: rd57e@nih.gov

National Center for Research Resources
Program Contact:
Dr. Louise E. Ramm
Deputy Director
Building 12A, Room 4009
Bethesda, MD 20892-5662
Phone: (301) 496-6023
Fax: (301) 402-0006
E-mail: lr34m@nih.gov

Questions regarding eligibility, policies, procedures, and other administrative aspects of the NIH AREA program should be referred first to the Office of Sponsored Programs at the educational institution. Issues that remain after consultation with the institutional Office of Sponsored Programs and that are not addressed in the AREA Program Guidelines may be directed to:

Dr. Janet M. Cuca
NIH AREA Coordinator
Office of Extramural Research
National Institutes of Health
6701 Rockledge Drive, Room 6192
Bethesda, MD 20892
Phone: (301) 435-2691
Fax: (301) 480-8443
E-mail: jc55g@nih.gov

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance, No. 93.390. Awards are made under the authority of the Public Health Service Act, Title IV, Part A (Public Law 78-410, as amended by Public Law 99-158; 42 USC 241 and 285) and administered in accordance with the PHS Grants Policy Statement and Federal regulations at 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

The PHS strongly encourages all grant and contract recipients to provide a smoke-free workplace and promote the non-use of all tobacco products. In addition, Public Law 103-227, the Pro-Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care or early childhood development services are provided to children. This is consistent with the PHS mission to protect and advance the physical and mental health of the American people.

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